

WATERBORNE COMMERCE AT U.S. PORTS (Foreign and Domestic Trades)

In 1996⁴, the waterborne commerce of the United States reached record levels for the third straight year--exceeding 2 billion metric tons. The 1996 tonnage increased 1.9 percent over 1995. Foreign trade continued to grow for the fifth consecutive year with volume exceeding the one billion mark for the third year in a row. Domestic tonnage rebounded after a slight decline in 1995 to the highest level since 1990. Table 6 provides a 42-year summary of the U.S. waterborne trade from 1955 to 1996. This table includes a breakdown of the foreign and domestic trade figures by trade segment.

Domestic Waterborne Trade

The 1996 domestic waterborne tonnage increased by .7 percent to 998.5 million metric tons. Domestic trade is comprised of 5 segments. The three principal segments--coastwise, lakewise, and internal--showed minor changes over 1995. Internal or inland waterway tonnage accounts for the major share of the domestic trade with 56.5 percent of the domestic tonnage. Table 7 compares the 1993 through 1996 tonnages for selected inland waterways. As shown,

Table 7
Selected Inland Waterway Tonnage for 1993 - 1996⁵
(Millions of Metric Tons)

Waterway	Tonnage				Percent Change (96 vs. 95)
	1993	1994	1995	1996	
Mississippi River	270.6	285.3	293.0	288.9	-1.4
Ohio River	206.1	214.7	212.3	214.8	1.2
Gulf Intracoastal	104.2	106.7	107.0	107.0	.1
Illinois Waterway	41.4	46.2	43.0	41.9	-2.5
Tennessee River	43.7	44.5	42.1	41.3	-1.9
Monongahela River	30.0	33.5	31.2	33.2	6.4
Columbia/Snake Rivers	16.3	21.9	22.1	21.8	-1.4
Black Warrior River	21.5	21.6	22.4	22.9	2.2
Kanawha River	20.2	20.2	21.0	22.5	7.1
Cumberland River	13.0	12.7	16.1	15.6	-3.1
McClellan-Kerr	8.5	9.7	9.3	9.6	3.2

Source: U.S. Army Corps of Engineers

4 This is the most recent year in which both foreign and domestic trade figures are available.

5 The tonnages shown for an individual waterway represents the cargo that originates, terminates, or flows through that particular waterway segment. Net inland waterway tonnage totals cannot be reconciled by summing the individual waterway figures because of double counting involved in recording in the individual flows.

the Mississippi and Ohio rivers and the Gulf Intracoastal Waterway continue to carry the majority of the inland waterway traffic.

Foreign Waterborne Trade

The Bureau of Census trade data in Table 8 shows that total U.S. foreign trade increased for the sixth straight year. For 1997, traffic totaled just over 1 billion metric tons with a value of \$625.6 billion. This represents a 4.6 percent increase in tonnage and a decline of less than one per cent in dollar value over the previous year. For the year, imports increased by 10.8 percent to 693.9 million metric tons with a value of \$403.6 billion (up 3.7 percent), while exports fell 5.2 percent to 372.9 million metric tons valued at \$222 billion (down 6.8 per cent).

Table 8
U.S. Waterborne Foreign Trade for 1990 to 1997
(Millions of Metric Tons and Billions of Dollars)

Year	Total		Imports		Exports	
	Tonnage	Value	Tonnage	Value	Tonnage	Value
1997	1066.8	\$625.6	693.9	\$403.6	372.9	\$222.0
1996	1019.7	\$627.3	626.4	\$389.1	393.3	\$238.2
1995	980.1	\$619.7	570.6	\$391.5	409.5	\$228.2
1994	937.8	\$565.7	598.1	\$376.4	339.7	\$189.3
1993	893.9	\$512.1	538.6	\$335.5	355.3	\$176.6
1992	878.4	\$495.5	486.2	\$310.3	392.2	\$185.2
1991	848.7	\$461.8	454.8	\$289.7	393.9	\$172.1
1990	876.6	\$458.0	501.8	\$299.6	374.8	\$158.4

Source: Bureau of the Census

Table 9 provides a comparison of foreign trade by coastal region for the period from 1995 to 1997. On a tonnage basis, half of the coastal regions showed increases over 1996 with the Gulf region showing the largest gain--11.6 percent. Only the South Atlantic and Gulf regions showed gains in trade value.

Table 9
U.S. Waterborne Foreign Trade by Coastal Region for 1995 - 1997
(Millions of Metric Tons and Billions of Dollars)

Coastal Region ⁶	1995		1996		1997		Percent Change (97 vs. 96)	
	Tonnage	Value	Tonnage	Value	Tonnage	Value	Tonnage	Value
North Atlantic	220.3	\$140.9	227.1	\$144.1	213.4	\$142.1	-6.1	-1.4
South Atlantic	79.5	96.3	82.7	94.9	90.0	95.9	8.8	1.1
Gulf	458.7	99.6	485.5	111.8	542.1	115.4	11.6	3.2
South Pacific	90.9	199.0	92.6	196.9	92.5	195.3	-0.1	-0.8
North Pacific	85.2	78.7	80.0	73.0	76.5	70.5	-4.4	-3.4
Great Lakes	45.5	5.2	51.8	6.6	52.3	6.4	1.0	-3.0
Total	980.1	\$619.7	1,019.7	\$627.3	1,066.8	\$625.6	4.6	-0.3

Source: Bureau of the Census

U.S. Waterborne Trade - Commodities and Trading Partners

Figure 1 illustrates the principal 1996 U.S. waterborne trade commodities on a tonnage basis. For total trade, petroleum products continue as the dominant commodity with nearly 42 percent of the market. Other key commodities include crude materials, such as nonmetallic minerals, ore, and forest products (17 percent), coal (14.4 percent), and food and farm products (12.5 percent). Within the foreign and domestic trade segments, petroleum remains the leading commodity with 47.1 percent and 36.2 percent of the respective trades. Other significant foreign trade commodities are food and farm products (15.8 percent) and crude materials (13.1 percent). On the domestic side, crude materials and coal each account for approximately 21 percent of the domestic sector. Table 10 provides additional commodity information for total trade and each of the foreign and domestic trade components.

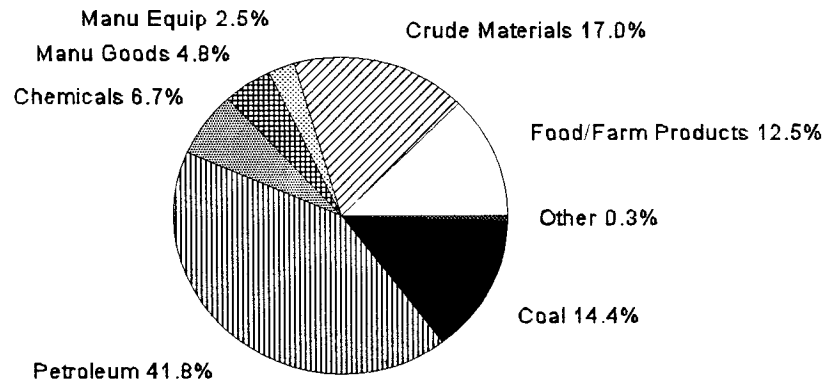
Table 11 highlights the leading U.S. trading partners by tonnage and value and by direction of trade flow for 1997. The U.S. foreign trade remains concentrated both in terms of tonnage and value. The top 5 trading partners account for approximately 42 percent of the tonnage and value. For the top 25 trading partners, the percentages grow to nearly 80 percent in both cases. Venezuela continues as the leading trading partner by tonnage. Japan remains as the dominate trading partner in all trade areas based on value.

⁶

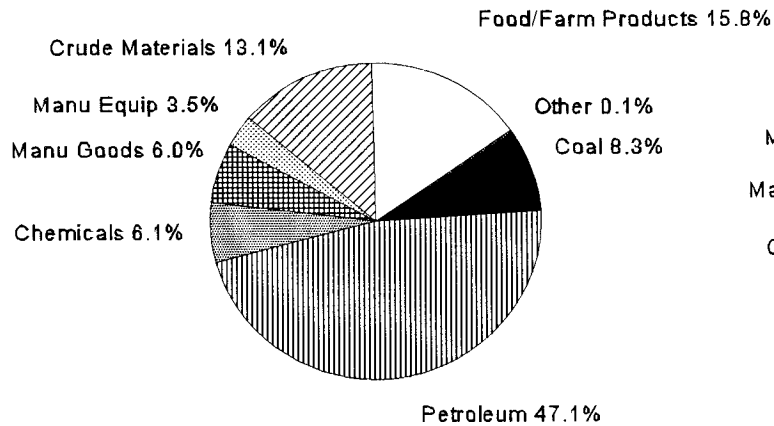
Foreign trade figures for Puerto Rico and the U.S. Virgin Islands are included in the South Atlantic region with Hawaii in the South Pacific and Alaska in the North Pacific region.

Figure 1

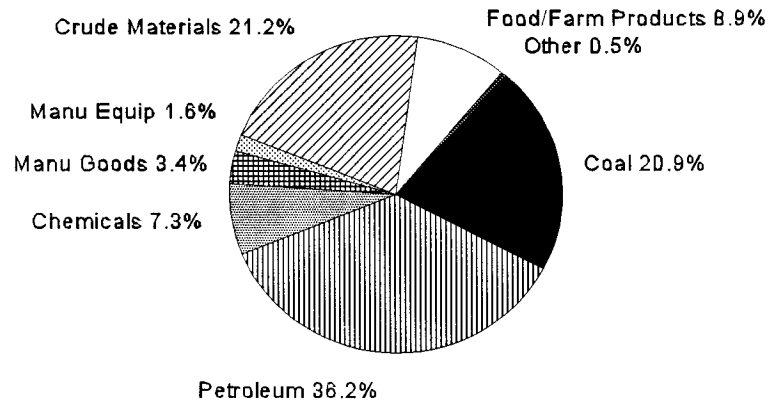
U.S. Waterborne Trade Commodities - 1996 (Tonnage Basis)



Total Trade



Foreign Trade



Domestic Trade

Source: U.S. Army Corps of Engineers

Table 10
Commodity Summary by Waterborne Trade Segment for 1996
(Millions of Metric Tons)

Commodity	Total Trade	Foreign Trade ¹			Domestic Trade					
		Total	Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intraterritory
Coal	14.4%	8.3%	1.2%	20.0%	20.9%	5.0%	18.5%	28.3%	21.2%	-
Petroleum	41.8%	47.1%	68.3%	12.4%	36.2%	73.7%	1.7%	24.4%	45.8%	94.5%
Chemical & Related Products	6.7%	6.1%	3.4%	10.5%	7.3%	6.1%	0.2%	8.4%	12.9%	2.8%
Crude Materials	17.0%	13.1%	12.2%	14.6%	21.2%	6.7%	76.5%	18.6%	13.0%	Neg.
Manufactured Goods	4.8%	6.0%	7.5%	3.5%	3.4%	2.9%	2.8%	4.1%	1.1%	-
Food and Farm Products	12.5%	15.8%	3.4%	35.9%	8.9%	3.0%	0.3%	14.4%	0.5%	-
Manufactured Equipment	2.5%	3.5%	3.9%	3.0%	1.6%	2.6%	Neg.	1.6%	0.2%	2.7%
Other	0.3%	0.1%	0.1%	0.1%	0.5%	Neg.	Neg.	0.2%	5.3%	Neg.
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Tonnage	2072.0	1073.5	664.6	408.9	998.5	242.6	104.2	564.3	80.7	6.7

Source: U.S. Army Corps of Engineers

¹ Foreign trade figures include tonnage from the Louisiana Offshore Oil Port (LOOP) and additional adjustments made by the Corps of Engineers to the Census foreign trade data.

Table 11
Leading U.S. Waterborne Trading Partners by Tonnage and Value for 1997
 (Thousands of Metric Tons/Millions of Dollars)

Rank	Country	Tonnage	Percent of U.S. Total
Total			
1	Venezuela	109,369	10.5%
2	Mexico	96,986	9.4%
3	Japan	79,999	7.7%
4	Canada	76,104	7.3%
5	Saudi Arabia	69,082	6.7%
Imports			
1	Venezuela	104,105	15.6%
2	Mexico	82,156	12.3%
3	Saudi Arabia	65,610	9.8%
4	Canada	48,582	7.3%
5	Nigeria	41,498	6.2%
Exports			
1	Japan	68,342	18.5%
2	Canada	27,522	7.4%
3	South Korea	23,079	6.2%
4	Taiwan	17,876	4.8%
5	Netherlands	17,345	4.7%

Rank	Country	Value	Percent of U.S. Total
Total			
1	Japan	\$115,880	18.5%
2	China	61,825	9.9%
3	Germany	32,705	5.2%
4	Taiwan	28,791	4.6%
5	South Korea	24,397	3.9%
Imports			
1	Japan	\$82,971	20.7%
2	China	53,817	13.4%
3	Germany	24,500	6.1%
4	Taiwan	19,661	4.9%
5	Venezuela	12,995	3.2%
Exports			
1	Japan	\$32,909	14.6%
2	South Korea	12,523	5.6%
3	United Kingdom	9,199	4.1%
4	Taiwan	9,130	4.1%
5	Brazil	8,906	4.0%

Source: U.S. Bureau of the Census

Foreign Trade Forecast

The following table provides a forecast of U.S. foreign trade for the period 1998 to 2001. The forecast projects a solid growth rate for this trade annualized at 6.3 percent. A similar growth pattern is expected for both imports and exports.

Table 12
Foreign Trade Forecast 1998 - 2001
 (Thousands of Metric Tons)

Year	Total	Annual Change	Imports	Annual Change	Exports	Annual Change
1997	1,066,763	-	693,894	-	372,869	-
1998	1,141,446	6.9%	747,324	7.7	394,122	5.7
1999	1,210,762	6.1%	791,416	5.9	419,346	6.4
2000	1,284,293	6.1%	838,109	5.9	446,184	6.4
2001	1,362,298	6.1%	887,558	5.9	474,740	6.4

Source: DRI/Mcgraw Hill and Mercer Management Consulting - World Sea Trade Service

U.S. Port Tonnages

The movement of waterborne commerce through the U.S. port system continues to be highly concentrated. Table 13 shows that the leading 50 U.S. ports--coastal and inland--handled 89.4 percent of the total waterborne trade in 1996. The top five ports total 27.7 percent and the top 20 account for 52.5 percent. The percentage distribution (based on tonnage) among the top 50 ports remains similar to the results shown in previous reports. In 1996, there were 3 ports that handled over 100 million metric tons. Even with this high degree of concentration, there were 145 ports--or 40 percent of all U.S. ports handling waterborne commerce--that handled over 1 million metric tons of cargo. These figures reflect the broad base that the U.S. port system is built on and the large volume of waterborne trade. Appendix A provides a listing of the 361 ports that handled waterborne cargo in 1996. Appendix B shows the 1996 waterborne tonnage by state.

Table 13
Top 50 U.S. Ports for 1996
Total U.S. Waterborne Commerce
(Metric Tons)

Rank	Port		Total	Domestic	Foreign
1	SOUTH LOUISIANA, PORT OF	LA	172,195,976	96,201,977	75,994,000
2	HOUSTON	TX	134,428,541	55,451,004	78,977,538
3	NEW YORK/NEW JERSEY	NY/NJ	119,386,017	68,143,397	51,242,619
4	NEW ORLEANS	LA	75,954,979	33,396,896	42,558,083
5	BATON ROUGE	LA	73,489,974	41,025,120	32,464,854
6	CORPUS CHRISTI	TX	72,991,783	21,628,934	51,362,849
7	VALDEZ	AK	69,958,509	68,004,158	1,954,351
8	HAMPTON ROADS	VA	67,175,076	14,988,942	52,186,134
9	PLAQUEMINE, PORT OF	LA	60,699,629	41,930,864	18,768,765
10	LONG BEACH	CA	52,974,997	20,291,296	32,683,701
11	TEXAS CITY	TX	51,159,289	19,107,696	32,051,594
12	PITTSBURGH	PA	46,152,208	46,152,208	-
13	MOBILE	AL	46,142,753	23,013,772	23,128,980
14	TAMPA	FL	44,717,307	29,442,604	15,274,703
15	LAKE CHARLES	LA	44,539,204	17,912,710	26,626,494
16	LOS ANGELES	CA	41,448,357	16,266,411	25,181,947
17	BALTIMORE	MD	39,509,826	12,696,214	26,813,613
18	PHILADELPHIA	PA	37,994,694	11,807,197	26,187,497
19	DULUTH/SUPERIOR	MN/WI	37,555,703	27,439,591	10,116,112
20	PORT ARTHUR	TX	33,708,800	5,896,209	27,812,591
21	BEAUMONT	TX	32,390,961	15,318,528	17,072,433
22	ST LOUIS	MO/IL	27,362,277	27,362,277	-
23	PORTLAND	OR	26,974,011	11,961,675	15,012,337
24	PASCAGOULA	MS	26,619,084	8,209,905	18,409,180
25	CHICAGO	IL	25,297,775	21,337,202	3,960,573
26	HUNTINGTON	WV	24,927,687	24,927,687	-
27	PAULSBORO	NJ	22,714,448	9,183,315	13,531,133
28	FREEPORT	TX	22,290,278	4,874,142	17,416,136
29	SEATTLE	WA	21,361,176	5,923,683	15,437,493
30	RICHMOND	CA	19,779,017	14,909,797	4,869,220
31	TACOMA	WA	19,496,009	6,581,425	12,914,584
32	BOSTON	MA	18,237,927	8,540,697	9,697,230
33	PORT EVERGLADES	FL	17,142,591	10,299,921	6,842,670
34	DETROIT	MI	16,876,945	11,167,481	5,709,464
35	SAVANNAH	GA	15,964,907	2,904,156	13,060,750
36	MEMPHIS	TN	15,694,065	15,694,065	-
37	INDIANA HARBOR	IN	15,324,863	14,592,637	732,226
38	JACKSONVILLE	FL	15,183,266	8,404,901	6,778,365
39	CLEVELAND	OH	15,168,809	11,560,456	3,608,353
40	LORAIN	OH	14,494,876	14,384,248	110,628
41	PORTLAND	ME	13,827,965	1,699,661	12,128,304
42	SAN JUAN	PR	13,709,506	9,365,784	4,343,722
43	ANACORTES	WA	12,561,421	10,734,327	1,827,094
44	TOLEDO	OH	11,822,035	6,384,247	5,437,788
45	CINCINNATI	OH	11,614,850	11,614,850	-
46	MARCUS HOOK	PA	11,218,139	6,531,795	4,686,344
47	HONOLULU	HI	10,895,235	9,389,467	1,505,767
48	GALVESTON	TX	10,560,259	3,611,463	6,948,796
49	OAKLAND	CA	10,187,506	2,340,824	7,846,682
50	CHARLESTON	SC	10,053,875	3,863,315	6,190,560
Total - All U.S. Ports			2,072,058,318		
Total - Top 5			575,455,488	27.7%	
Total - Top 10			899,255,481	43.4%	
Total - Top 20			1,087,427,039	52.5%	
Total - Top 50			1,851,935,389	89.4%	

Source: U.S. Army Corps of Engineers

Table 14 shows the tonnage distribution for the top 150 U.S. ports handling waterborne commerce in 1996. The port distribution is categorized for each of the three principal trade segments--total, domestic, and foreign. Appendix C provides a more detailed distribution analysis for the 361 ports that handled waterborne cargo in 1996.

Table 14
Tonnage Distribution for Top 150 U.S. Ports for 1996

Port Tonnage Handled	Number of Ports					
	Total Trade	Percent	Domestic Trade	Percent	Foreign Trade	Percent
> 100 Million Tons	3	2.0%	-	-	-	-
50 to <100 Million Tons	7	4.7%	4	2.7%	4	2.7%
25 to <50 Million Tons	15	10.0%	7	4.7%	10	6.7%
10 to <25 Million Tons	26	17.3%	21	14.0%	14	9.3%
5 to <10 Million Tons	24	16.0%	25	16.7%	11	7.3%
1 to <5 Million Tons	70	46.7%	65	43.3%	40	26.7%
<1 Million Tons	5	3.3%	28	18.6%	42	28.0%
No Tonnage Reported	-	-	-	-	29	19.3%
Total	150	100.0%	150	100.0%	150	100.0%

Source: U.S. Army Corps of Engineers

The concentration of activity among the leading U.S. container ports is reflected in Table 15. For 1997, the top 25 ports handled 98.3 percent of U.S. foreign container cargo based on twenty-foot equivalent units (TEUs). The leading 10 ports accounted for 79.7 percent of the total with the Los Angeles-Long Beach port complex handling nearly one-third of all U.S. foreign container traffic. The 1997 container traffic increased by 10.9 percent--1.4 million TEUs--over 1996. The top three ports captured approximately 44 percent of the 1997 total.

Table 15
Top U.S. Container Ports for 1996 and 1997

Rank	Port	TEUs
1	Long Beach, CA	2,357,075
2	Los Angeles, CA	1,873,491
3	New York/New Jersey	1,533,429
4	Seattle, WA	939,321
5	Oakland, CA	803,159
6	Charleston, SC	800,675
7	Hampton Roads, VA	722,913
8	Houston, TX	537,627
9	Tacoma, WA	506,131
10	Miami, FL	504,913
11	Savannah, GA	455,710
12	Port Everglades, FL	422,161
13	Baltimore, MD	275,832
14	Portland, OR	210,193
15	New Orleans, LA	204,320
16	Jacksonville, FL	185,507
17	San Juan, PR	154,420
18	Gulfport, MS	106,776
19	Wilmington, DE	106,080
20	W. Palm Beach, FL	101,451
21	Wilmington, NC	85,650
22	Philadelphia, PA	75,062
23	Boston, MA	54,021
24	Richmond, VA	41,454
25	Chester, PA	35,924
Total - Top 25 Ports		13,093,295
		98.2%
Total - All Ports		13,328,532

Rank	Port	TEUs
1	Long Beach, CA	2,673,199
2	Los Angeles, CA	2,084,924
3	New York/New Jersey	1,738,391
4	Charleston, SC	955,488
5	Seattle, WA	953,304
6	Oakland, CA	843,066
7	Hampton Roads, VA	824,818
8	Miami, FL	623,658
9	Houston, TX	609,451
10	Tacoma, WA	551,164
11	Savannah, GA	529,552
12	Port Everglades, FL	453,174
13	Baltimore, MD	260,355
14	New Orleans, LA	231,094
15	Portland, OR	209,923
16	Jacksonville, FL	198,509
17	San Juan, PR	143,187
18	Gulfport, MS	120,809
19	W. Palm Beach, FL	112,409
20	Wilmington, DE	103,326
21	Philadelphia, PA	90,428
22	Wilmington, NC	86,450
23	Boston, MA	62,229
24	Richmond, VA	43,416
25	Honolulu, HI	36,666
Total - Top 25 Ports		14,538,990
		98.3%
Total - All Ports		14,794,751

Source: PERS, Ports Import/Export Reporting Service, Journal of Commerce

Notes:

- 1 Total includes the 50 states and Puerto Rico
- 2 Data includes only loaded containers moving in foreign trade
- 3 Data excludes military cargo as required by law
- 4 Twenty-foot equivalent units (TEUs) are the number of containers measured in twenty-foot equivalents